

Wed Apr 16 08:05:36 2003

us-09-001-737-7.rml

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GenCore version 5.1.4_p5.4578
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OM nucleic - nucleic search, using sw model

Run on: April 15, 2003, 00:17:43 ; Search time 64.4462 Seconds
(without alignments)
7904.114 Million cell updates/sec

Title: US-09-001-737-7

Sequence: 1 GAAATCGGCTTCATATGCA.....TGGCGGATAGCCGCAATTC 1661

Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents.NA.*
1: /cgnt_6/protdata/1/lna/5A.COMB.seq.*
2: /cgnt_6/protdata/1/lna/5B.COMB.seq.*
3: /cgnt_6/protdata/1/lna/5A.COMB.seq.*
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6: /cgnt_6/protdata/1/lna/5B.COMB.seq.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1035.4	62.3	5365	4	US-08-961-527-77
2	735.6	44.3	1623	4	US-09-134-001C-1868
3	589.8	35.5	1647	4	US-09-472-971-5
4	589.8	35.5	4524	4	US-09-472-971-5
5	544.4	32.8	2416	4	US-09-221-017B-895
6	528.6	31.8	1838	3	US-08-470-260-7
7	528.6	31.8	1838	3	US-08-471-491-7
8	528.6	31.8	1838	3	US-08-466-662-7
9	496.6	29.9	2284	2	US-08-256-841C-6
10	496.6	29.9	2284	2	US-08-467-822-28
11	496.6	29.9	2284	4	US-08-467-822-28
12	458.6	27.6	4180	4	US-08-466-248-28
13	458.6	27.6	4180	4	US-08-955-562A-3
14	458.6	27.6	4403765	4	US-09-103-840A-2
15	458.6	27.6	4411229	4	US-09-103-840A-1
16	446.8	26.9	1626	2	US-08-997-080-159
17	446.8	26.9	1626	2	US-08-997-080-159
18	446.8	26.9	1626	2	US-08-997-080-159
19	446.8	26.9	1626	4	US-09-095-855-159
20	446.8	26.9	1626	4	US-09-324-542-159
21	444.8	26.8	1569	2	US-08-997-362-113
22	444.8	26.8	1569	2	US-08-997-362-113
23	444.8	26.8	1569	2	US-08-997-362-113
24	444.8	26.8	1569	4	US-09-095-855-113
25	444.8	26.8	1569	4	US-09-324-542-113
26	416.6	25.1	1620	2	US-08-461-775-10
27	416.6	25.1	1620	3	US-09-031-606-10

28	411	24.7	2668	2	US-08-461-775-11
29	411	24.7	2668	3	US-09-031-606-11
30	362	21.8	1320	2	US-08-461-775-8
31	362	21.8	1320	2	US-09-031-606-8
32	353.2	21.3	2167	2	US-08-461-775-9
33	353.2	21.3	2167	3	US-09-031-606-9
34	315.8	19.0	1777	4	US-08-828-199A-1
35	273.8	16.5	985	2	US-08-997-080-161
36	273.8	16.5	985	2	US-08-997-362-161
37	273.8	16.5	985	4	US-09-095-855-161
38	273.8	16.5	985	4	US-09-324-542-161
39	273.8	16.5	985	4	US-08-997-080-161
40	271.8	16.4	927	2	US-08-997-080-116
41	271.8	16.4	927	2	US-08-997-362-116
42	271.8	16.4	927	4	US-09-095-855-116
43	271.8	16.4	927	4	US-09-324-542-116
44	271.8	16.4	927	4	US-09-031-606-116
45	178.4	10.7	568	3	US-08-714-918-51

ALIGNMENTS

RESULT 1
US-08-961-527-77
Sequence 77, Application US/08961527
Patent No. 6420135

GENERAL INFORMATION:
APPLICANT: Charles Kunsch
TITLE OF INVENTION: Streptococcus pneumoniae Polynucleotides and Sequences
NUMBER OF SEQUENCES: 391
CORRESPONDENCE ADDRESS:
ADDRESSEE: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
CITY: Rockville
STATE: Maryland
COUNTRY: USA
ZIP: 20850

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4MB storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2

SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/961,527

FILING DATE:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Brookes, A. Anders
REGISTRATION NUMBER: 36,373

TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512

INFORMATION FOR SEQ ID NO: 77:
SEQUENCE CHARACTERISTICS:
LENGTH: 5365 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear

Query Match 62.3% Score 1035.4; DB 4; Length 5365;
Best Local Similarity 77.4% Pred. No. 2.3e-295;
Matches 155; Conservative 0; Mismatches 366; Indels 0; Gaps 0;
14 TATGCAAGAAATTAATTCACAGATCCGCGTCGCGGATTCGCGGATTCGA 73
DB 277 TATGCAAGAAATTAATTCACAGATCCGCGTCGCGGATTCGCGGATTCGA 336

OY 74 TATGTAGAGATACCGTCGTAAGTACGCTGGTCTCTAAGGGCCGCAATGTTGTTCTGA 133
 DB 1337 TATCTTGGAGACACCTGTTAAAGTAACTGGAGCCAAAGGATGCGTCTTGA 396
 OY 124 AAAAGCTTTGTTCTCCCTTAATTAATGAGCGGGTAACCATGCTTAAAGAGATCGA 193
 DB 397 AAAGCTATGCGTTCACCCCTTGTATACCAATGAGCGGTGACATTTGCCAAGAAATCGA 456
 OY 194 ATTAGAAAGTATTTTAAAGATGAGCAAAATTTGGTGTGAAAGTGGCTCTTAAAC 253
 DB 457 ATTGGAAGACATTTTGAATAATTTGGGTAAAGTTAGTATACAGAAAGTACCTTCAAC 516
 OY 254 CATGTAATTTCTGTGTGATGGAGACACTACTGACAGTCTTTGACACAGCATTTGTC 313
 DB 517 CATGTAATTTCTGTGTGATGGAGACACTACTGACAGTCTTTGACACAGCATTTGTC 576
 OY 314 TGAAGACTAAATAAATGTACAGAGGTGTAATCCAAATGCTATCCGTGAGCATTTGA 373
 DB 577 TGAAGACTAAATAAATGTACAGAGGTGTAATCCAAATGCTATCCGTGAGCATTTGA 636
 OY 374 AACAGCAACAGACAGCTGTGTAAGCCTTGAAGCCATTGCACTGTATCTGCAAT 433
 DB 637 AACAGCAACAGACAGCTGTGTAAGCCTTGAAGCCATTGCACTGTATCTGCAAT 696
 OY 434 GGAAGCTATTTCTGAGTGTGCTGAGTATCATGAGCTGTGAAAAAGTTGGAGATAT 493
 DB 697 AGAAGCTATTTCTGAGTGTGCTGAGTATCATGAGCTGTGAAAAAGTTGGAGATAT 756
 OY 494 CTGAGAGCTATGAGCGTGTGGGCAAGATGGTGTGATTCATCTGAGAGATCTGAGG 553
 DB 757 CTGAGAGCTATGAGCGTGTGGGCAAGATGGTGTGATTCATCTGAGAGATCTGAGG 816
 OY 554 TATGGAACACATGTAAGTGTGTAAGGATGCAATTTTACCCTGGTCTGCTCA 613
 DB 817 TATGGAACACATGTAAGTGTGTAAGGATGCAATTTTACCCTGGTCTGCTCA 876
 OY 614 ATACATGCTCAGACACATGAAAAATGTTGCAAGCTTGAAGAACCCATTTATCTTAAT 673
 DB 877 GTACATGCTCAGACACATGAAAAATGTTGCAAGCTTGAAGAACCCATTTATCTTAAT 936
 OY 674 CACGATAAAAAGTGTCAACATCAAGACATTTTGGCACTACTTGAGAGAACTTTAA 733
 DB 937 TACAGCAAGAAAAATTTCCAAATTCGAAGAAATCTTGGCACTACTTGAGAGAACTTTCA 996
 OY 734 AACCAACCGTCACTATCATTAATTTGAGATGATGATGATGATGATGATGATGATGAT 793
 DB 997 AACCAACCGTCACTATCATTAATTTGAGATGATGATGATGATGATGATGATGATGAT 1056
 OY 794 TGTCTTGAACAAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 853
 DB 1057 TGTCTTGAACAAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 1116
 OY 854 TGAATGCTGAAGCTATGCTTGAAGACATGCTATCTGACAGTGTGATACAGTATAC 913
 DB 1117 TGAATGCTGAAGCTATGCTTGAAGACATGCTATCTGACAGTGTGATACAGTATAC 1176
 OY 914 AGAGATCTAGACCTGTAATTAAGATGCTAACATGACAGCCCTTGGACAGGCTGCTAA 973
 DB 1177 AGAGATCTAGACCTGTAATTAAGATGCTAACATGACAGCCCTTGGACAGGCTGCTAA 1236
 OY 974 GATTACAGTTGATTAAGATGACAGTAAATTTGTAAGTGTGTAAGTGTGTAAGTGTG 1033
 DB 1237 AGTACAGTTGATTAAGATGACAGTAAATTTGTAAGTGTGTAAGTGTGTAAGTGTG 1296
 OY 1034 TGTACACCGTATTTGCACTGATTAATGCAATTTAGCAAAACAACTTGTGATTTGACG 1093
 DB 1297 TGTACACCGTATTTGCACTGATTAATGCAATTTAGCAAAACAACTTGTGATTTGACG 1356
 OY 1094 TGAAGAACTTAAGAGAGTGTGGGAAATTTAGCTGTGTGATTAAGAGAGAG 1153
 DB 1357 TGAAGAACTTAAGAGAGTGTGGGAAATTTAGCTGTGTGATTAAGAGAGAG 1416
 OY 1154 AGCTCCACAGACAGCTTTTAAAGAAATGAAGTGTGATTTGAGATGCTCTTAATGCT 1213

DB 1417 AGCCGCACTGAAAGTGAAGAAATGAAATCCGCAATTTGAAGATGCGCTCAAGCC 1476
 OY 1214 TACAGCTGAGCGGTGTAAGAGTATGCTGTGTGTGTGTAAGAGACTTATACGT 1273
 DB 1477 TACAGCTGAGCGGTGTAAGAGTATGCTGTGTGTGTGTAAGAGACTTATACGT 1536
 OY 1274 TATGAAAAAGTACAGCTCTGTAGCTTGAAGCGGATGATGCTACTGAGCTTAACCTGT 1333
 DB 1537 GATTCAGCTGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1596
 OY 1334 GCTGTGTGTGTGTAAGAGCTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAG 1393
 DB 1597 TCTCGGTGTGTGTAAGAGCCCTTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 1656
 OY 1394 GGTAGTATTTGTAAGTGTGTAAGAGCCCTGCAAGAGATTTATGCTCAACAG 1453
 DB 1657 TATGCTATGATGCTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 1716
 OY 1454 TGAAGTGTGTGTAAGTGTGTAAGAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAG 1513
 DB 1717 GAGTGTGTGTAAGTGTGTAAGAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 1776
 OY 1514 GCTGCAAAATGAGAGCTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 1573
 DB 1777 CCTGCAAAATGAGAGCTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTGTAAGTGTG 1836
 OY 1574 TAACTGTAAGAGCTGTGTAAGAGCCCTGCAAGAGATTTATGCTCAACAG 1633
 DB 1837 TAACTGTAAGAGCTGTGTAAGAGCCCTGCAAGAGATTTATGCTCAACAG 1896
 OY 1634 G 1634
 DB 1897 G 1897

RESULT 2
 US-09-134-001C-1868
 ; Sequence 1868, Application US/09134001C
 ; Patent No. 6380370
 ; GENERAL INFORMATION:
 ; APPLICANT: Lyon Doucette-Stamm et al
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
 ; FILE REFERENCE: GTC-007
 ; CURRENT APPLICATION NUMBER: US/09/134,001C
 ; PRIOR FILING DATE: 1998-08-13
 ; PRIOR APPLICATION NUMBER: US 60/055,779
 ; PRIOR FILING DATE: 1997-08-14
 ; NUMBER OF SEQ ID NOS: 5674
 ; SEQ ID NO 1868
 ; LENGTH: 1623
 ; TYPE: DNA
 ; ORGANISM: Staphylococcus epidermidis
 US-09-134-001C-1868

Query Match 44.3%; Score 735.6; DB 4; Length 1623;
 Best Local Similarity 66.7%; Pred. No. 3.6e-207;
 Matches 1050; Conservative 0; Mismatches 524; Indels 0; Gaps 0;

OY 14 TATGGAAGAAAGTCAAAATTTTCAAGCAGATGCGGCTGCTGCAATGCTGTGGCGGAGTGA 73
 DB 3 TATGGAAGAAAGTCAAAATTTTCAAGCAGATGCGGCTGCTGCAATGCTGTGGCGGAGTGA 62
 OY 74 TATGTAGAGATACCGTCAAAAGTAAAGCTTGTCTTAAAGGGCCGAATGTTGTTCTGA 133
 DB 63 TAAATTTGCAAGCGGTGTAAGAGTGTGTAAGAGTGTGTAAGAGGCGTAAGAGTGTGTAAG 122
 OY 134 AAAGCTTTGTTCTCCCTTAATTAATGAGCGGGTAAACATGCTTAAAGAGATCGA 193
 DB 123 TAAAGATTTACACACCTTTTAAATTAACAGAGATGTTGTAAGAAATGTA 182

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Db 1263 ATATCAACAAAGTAAGTAAGTAATTAACACAGAAAGTGATGTTGAACGGGGTGTAAAT,
 Oy 1274 TATGGAAGAGTACAGAGCTTGTAGCGTTGAGGCGGATGCTACTGAGGACGTAAG
 Oy 1274 TATGGAAGAGTACAGAGCTTGTAGCGTTGAGGCGGATGCTACTGAGGACGTAAG
 Db 1283 ATTAAGAGCATTTACACAGACCGTGTAGAACAAATTGTGAAATATGCAGATTAAGGGTTTC
 Oy 1394 CGTGAATTAATGCAAGTGTAAACAAAGCCCTGCGAGAAAGGATTTATATGCTGCAGAACAG
 Db 1383 AATTATTGTGTACAGCTTTAAACATGTGTAAAGCGGGCGTGGTTCAATGACAGCAACAA
 Oy 1454 TGAAGTGGGTATATGTTATTAACAGAGATTCATTTGACCTGTCAAGATTAACAGATAGC
 Db 1443 TGAATGGGTATATGTTATTAACAGAGATTCATTTGACCTGTCAAGATTAACAGATAGC
 Oy 1514 GCTTCAAAATGACAGCTTGTAGAGTACGTTATTTATGACAAAGACAGATTTGGCTAA
 Db 1503 GTTCAACATGTACACAGCAAGGTAGCTGTATGTTCTTACAACTGAAACAGATGTTGGCTAG
 Oy 1574 TTAACCTGAAACAG 1587
 Db 1563 TATTCAGAGCCAG 1576
 RESULT 3
 US-09-472-971-5
 Sequence 5, Application US/09472971
 Patent No. 6197547
 GENERAL INFORMATION:
 APPLICANT: SOCO, Kazuo
 APPLICANT: YANAGI, Hideaki
 APPLICANT: YURA, Takashi
 TITLE OF INVENTION: TRIGGER FACTOR EXPRESSION PLASMIDS
 FILE REFERENCE: 1422-409P
 CURRENT APPLICATION NUMBER: US/09/472, 971
 CURRENT FILING DATE: 1999-12-28
 EARLIER APPLICATION NUMBER: JP10-372965
 EARLIER FILING DATE: 1998-12-28
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO 5
 LENGTH: 1647
 TYPE: DNA
 ORGANISM: Escherichia coli
 US-09-472-971-5
 Query Match 35.5%; Score 589.8; DB 4; Length 1647;
 Best Local Similarity 61.3%; Pred No. 3,8e-164;
 Matches 986; Conservative 0; Mismatches 617; Indels 6; Gaps 2
 Oy 18 GCAAAAGAAATCAATTTTCACAGATGCGCGTCTGCCATGTCGCGCGAGATTGATATG 77
 Db 7 GCTAAGACAGTAAATTCGTAACGACGCTGTGTGAATATGCTGCGCGGTAAAGTA 66
 Oy 78 TTAACGATACCGTCAAGATACCGTTGTCTTAAAGGGCGCAATGTTGTTCTGAAAAA 137
 Db .67 CTGCGAGATGAGGTGAATATTCCTGCTGATGCCAAAAGCCGTAACGATATCTGTGATAAA 126
 Oy 138 GCTTTGGTGTCCCTTAATTAAGTATGACGGGGTAAACATTCGCTAAAGATGAATTA 197
 Db 127 TCTTTCGGGACCGACATCAACCAAGATGATGTTCCGTTGCTGTGTAATATGAACTG 186
 Oy 199 GAAGATCATTTGAAACATGCGAGAAATTTGGTGTGCTGAAGTGGCTTTAAACG
 Db 187 GAAGACAGATTCGAAATATTTGGGTGGCGGATGCTGAAGAAATGTTGCTCTTAAGC
 Oy 258 GATATTCGTGTGATGGAACACATCTGCAACACTTTTACACAAAGCATTTGT
 Db 247 GACCGTTCAGCGGACGATACACACATGCAACGCTACTGCTCAGGGCTATTC
 Oy 318 GGACATAAAATGTGACACAGAGTGTAAATCCAAATTTGATTCGTCGAGC

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Db 307 GGTCTGAACGCTGTTGCTCGGGGATGAACCCGATGACCTGTAACGTTGATCGAACAA 366
 QY 378 GCACACGACCAAGCTGTGTAAGCCTTGAAGCCTTGTCAACCTGTATCTGCGAAGAA 437
 Db 367 GCGGTTCACCGCTGCAAGTAAGCAAGCGCTGCGTACCTGCTGTGACTTAA 426
 QY 438 GCTATTGCTCAGGTGCTGAGTATCATACGCTC---TGAAAAAGTGAAGATATGCT 494
 Db 427 GCGATGCTCAGGTGTTGACCATCTCCGTAACCTCGAAGAAACCGTATGATATC 486
 QY 495 TCAGAACCTATGAGCGGTGGGCAAGGTGTGTGTTACATCGAAGAAATCTGAGAGT 554
 Db 487 GCTAACCATGGAACAGTCCGTTAAAGAGCGTTATACCGTTGACGCTGACCGGT 546
 QY 555 ATGGAACGAAAGCTTGAAGTGTGAAGCATATGTCACCTGTTACTGCTCTCA 614
 Db 547 CTGAGAGCAAGTGAAGGTGTGAAGTGTGAGTGTGACCGGTGCTGCTGCTCT 606
 QY 615 TACATGCTACAGACATGAAATAATGTTGACAGCCTTGAAGCCATTTACTTAA 674
 Db 607 TACTTCATGACAAACCGGAACTGGCCAGTAATGCTCGGTTCTGGAAGCTGTGCGAAA 666
 QY 675 ACGGATAAAAAGTGTCAACATCCAGACATTTTCCACTACTTGAAGAACTTCTTAA 734
 Db 667 GCTACGACAAATATCTCCAACTCCGCAATGCTCGGTTCTGGAAGCTGTGCGAAA 726
 QY 735 ACGAACGCTGCTACTTATTTAGATGATGATGATGATGATGATGATGATGATGATGAT 794
 Db 727 GCAGGCAACCGCTGCTGATCATCGTGAATGATGATGATGATGATGATGATGATGAT 786
 QY 795 GCTGTGACAAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 854
 Db 787 GTTGTTCATGACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 846
 QY 855 GATGCTGTAAGCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 914
 Db 847 GATGCTGTAAGCTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 906
 QY 915 GAGGATCTGAGCTTGAATTAAGATCTTCAATGACAGCCCTTGGACGCTGCTAAG 974
 Db 907 GAAAGAGCTGATGAGCTGAGCAAAACCACTGGAAGCACTGCTGCTAAGCT 966
 QY 975 ATTACAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1034
 Db 967 GTTGTATGACAAAGCAACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1026
 QY 1035 GCTACGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1094
 Db 1027 CAGGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1086
 QY 1095 GAAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1154
 Db 1087 GAAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1146
 QY 1155 GCTGCAAGAGAGAGCTTAAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAGTAAG 1214
 Db 1147 GCTGCTACGAG 1206
 QY 1215 ACAGCTGAG 1274
 Db 1207 ACCGCTGAG 1266
 QY 1275 ATTGAAAAAGTAGAGCTTGAAGTGTGAGGAGATGATGATGATGATGATGATGATGAT 1331
 Db 1267 GCGCTTAAAGCTGCTGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1326
 QY 1332 GTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1391
 Db 1337 GCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1386
 QY 1392 TCGTAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1451
 Db 1387 TCTGTTGTTGCTAACACCGTTAAAGCGGAGCGAGCACTACGTTTACACGAGCAACC 1446

QY 1452 GGTGAGTGGGTGATGATGATTAAGAGAGATCATGACCTGTCAAGATGACATCA 1511
 Db 1447 GAGAGAAATACGCAACATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1506
 QY 1512 GCGCTTCAAAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1571
 Db 1507 GCTTGTGACATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1566
 QY 1572 AATAAAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1620
 Db 1567 GACCTGCGGAAAAAGATGACATGATGATGATGATGATGATGATGATGATGATGATGAT 1615

 RESULT 4
 US-09-472-971-7
 : Sequence 7, Application US/09472971
 : Patent No. 6197547
 : GENERAL INFORMATION:
 : APPLICANT: SODO, Kazuo
 : APPLICANT: YANAGI, Hideki
 : APPLICANT: YURA, Takashi
 : TITLE OF INVENTION: TRIGGER FACTOR EXPRESSION PLASMIDS
 : FILE REFERENCE: 1422-409P
 : CURRENT APPLICATION NUMBER: US/09/472,971
 : EARLIER FILING DATE: 1999-12-28
 : EARLIER APPLICATION NUMBER: JP80-372965
 : NUMBER OF SEQ ID NOS: 7
 : SOFTWARE: Patent Ver. 2.1
 : SEQ ID NO 7
 : LENGTH: 4524
 : TYPE: DNA
 : ORGANISM: Escherichia coli
 US-09-472-971-7
 Query Match 35.5%; Score 589.8; DB 4; Length 4524;
 Best Local Similarity 61.3%; Pred. No. 6,7e-164;
 Matches 986; Conservative 0; Mismatches 617; Indels 6; Gaps 2;
 QY 18 GCAAGAGATCAATTTTCAGAGATGCGGCTGCTCCATGCTGCGGAGTTGATG 77
 Db 389 GCTAAAGACCTAAATTCGTAACGACGCTGTGTAATGCTGCGGAGTTAACTGA 448
 QY 78 TTACGATACGCTGAAGTAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 137
 Db 449 CTGGCAATGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 508
 QY 138 GCTTTCGCTTCCCTTAATTAATGATGATGATGATGATGATGATGATGATGATGATGAT 197
 Db 509 TCTTCGATGACACCATGACCAAGATGATGATGATGATGATGATGATGATGATGATGATGAT 568
 QY 198 GAAATATTTTGAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 257
 Db 569 GAAATCAAGTTGAAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 628
 QY 258 GATATGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 317
 Db 629 GACCTCTCAGGCGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 688
 QY 318 GGAATAAAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 377
 Db 689 GGTCTGAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 748
 QY 378 GCAACACCAACAGCTGTTGAAGCTTGAAGCACTGCTGCAACCTGATCTGCAAGAA 437
 Db 749 GCGGTTCACGCTGCAAGTTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 808
 QY 438 GCTATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 494
 Db 809 GCGATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 868
 QY 495 TCAGAACCTATGAGAGCTGTGGCAACGATGATGATGATGATGATGATGATGATGATGATGAT 554

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Dh	869	GCTGAAGCGATGGAACAAGTCGGTTAAAGAAAGCGGTTATCACCGTTAGAACGGTACC	928
Oy	555	ATGGAACAGAACTGTAAGTGGTTGGAAGGATGCATATTTGACCGTGGTACCTGTCTCA	614
Dh	929	CTCAGACAGAACTGCGCTGGTTTAAAGATATCGAGTTTCGACCGTGGTACCTGTCTCT	988
Oy	615	TACATGGTCACAGCAATGAAAAAATGTTTGCAGACCTTGAAAAACCATTTATCTTATC	674
Dh	989	TATCTTATCAACAAAGCGGGAAGCTGGGGCGATGAAACTGTGAAAGCCCGTTCATCTCTG	1044
Oy	675	ACGGATAAAAAAGTGCACAAACCTCCAGACATTTTGGCCACTGTAGAAAGTCTTAA	734
Dh	1049	GCAGCAAGAAAACTCTCAACATCCCGGAATGTCTCCGGTTCTGGAACTGTGTCCAA	1108
Oy	735	ACCAACCGTCATTACTCATTTTTCAGATGATGTGATGTGTGAAGCACTTCAACCTT	794
Dh	1109	GCAGGCAAAACCGCTGCTGATCTGTGTAAGATGTGAAAGGCAACCGCTGGCAACTGT	1168
Oy	795	GTCCTGAACAAGATGTGGTACTTTCATGTGTGGTTCGTCAAAACCGCAGATTTGGT	854
Dh	1169	GTTGTGAACACCAATCTGTGGCATGTGTAAAGTCCGTGGGTTAAACACCGGCTTGGC	1228
Oy	855	GATCGTCTAAAGCTATGCTTAAAGACATTTGCTTACCTGACAGTGTGTACGTATTACA	914
Dh	1229	GATCGCTTAAAGCTATGCTGACAGATATGCAACCTGACTGGGGTACCGTATCTCT	1288
Oy	915	GAGAGTCAGAGCTGAATTAAGATGCTACAAAGACACCCCTTGGACAGGCTGTAG	974
Dh	1289	GAAAGATCGGTATGAGAGCTGGAAGAAAGCAACCCCTGGAAGCTGGGTACGTAAAGCT	1348
Oy	975	ATTACAGTGAATAAATGACGACAGTAAATGTTGTAAGTTACGAAAGTTCAGAACTAT	1034
Dh	1349	GTTGTGATCAACAAACAAACACCCACATCTATCATGTGATGGCTGGTGAAGAAAGCTGCACATC	1408
Oy	1035	GCTAACGTTATGCTACTGATTTAATCCCAATTAGAACAAACACTTCTGACTTGAACCT	1094
Dh	1409	CAGGCTCGTGTGCTAGATCCGTACGTCACAGTATGAAAGACAACTTCTGACTACAGACCT	1468
Oy	1095	GAAGAACTACAGAACGTTTGGCAAAATTACGTGGTGTGTATATCAAGATAGGA	1154
Dh	1469	GAAGAACTGCAAGAACGCTGTAGCCAACTGGGAGGCGGCTTCAAGTATCAAGGTGGT	1528
Oy	1155	GCTCAACAGAGACGCTTTAAAGAAATGAACCTGCATTAGAGATGCTCTAAATGCT	1214
Dh	1529	GCTGTACCGCAAGTTAATATGAAGAAAGAAAGACGCGTTATAGATGACCTCTACGCG	1588
Oy	1215	ACACGTGACGCTTGAAGAAGATGCTGTGGTGGTGGTGAAGACACTTATTAAGGTT	1274
Dh	1589	ACCGCTGCTGGGTATAGAAGAGCGTGTGCTGTGGTGTGTGTCGCTATCCGCTA	1648
Oy	1275	ATTGAAAAAGTACACCTCTTGACTTGAAGGGCGATGTGCTCTACGAGCAACA---TT	1331
Dh	1649	GGCTTAACTGCTGACCTGCGTGTGCGATGACGAAGCAAGACAGTGGGTATCAAGTT	1708
Oy	1332	GTCGTGCTGCTGTAAAGACCGTGAAGCTCAAAATGCTTAAATGCTGGTACGAAGC	1391
Dh	1709	GCACGTGCTCATGGAACCTCCGCTGCTCATGATGATTAAGCTGGCGGAAGAACCG	1768
Oy	1392	TCCGTATGTTATGACAAAGTGAAGAAACGCTGCAAGAACAGATTAATGCTGCA	1451
Dh	1769	TCTGTGTTGCTGACACGTTTAAAGGGGGCGAGCGCAACTACGTTTACAAAGCAGAAC	1828
Oy	1452	GGTGAAGTGGTATATGATTTAAACAGCAATCATTAACCTGTGTAAGATACAGATCA	1511
Dh	1829	GAAAGATACGCAACCTATGATGCAATGGGTATCTCGATCAACCAAGGTACCTGTTCT	1888
Oy	1512	GGCCTTCAAAATGACACTTCTGTAGCTATCTTATTTTGAACAAGAAAGCTGTGTCT	1571
Dh	1889	GCCTGCAAGTACACGACTTCTGTGGCTGGCTGATGATACACCAAGAAATGATGTTTAC	1948
Oy	1572	AATTAACCTGAACAGACTACGCCAGCGCAGCAATGACACACAGATATGG	1620

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Db      1949 GACCTGGCCGAAAAACGATCGACTGACTGATGAGCGCGTGGTGGCGGTATGCG 1997

RESULT 5
US-09-221-017B-895/C
  Sequence 895, Application US/09221017B
  Patent No 6444799
  GENERAL INFORMATION:
    APPLICANT: ROSS, Bruce C.
    TITLE OF INVENTION: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF
    NUMBER OF SEQUENCES: 1120
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: MORRISON & FOERSTER
      STREET: 755 PAGE MILL ROAD
      CITY: Palo Alto
      STATE: CA
      COUNTRY: USA
      ZIP: 94304-1018
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
    COMPUTER: IBM Compatible
    OPERATING SYSTEM: Windows
    SOFTWARE: FASTSEQ for Windows Version 2.0b
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/221,017B
      FILING DATE: 23-DEC-1998
    CLASSIFICATION:
      PRIOR APPLICATION DATA:
        APPLICATION NUMBER: PP1182
        FILING DATE: 31-DEC-1997
      PRIOR APPLICATION DATA:
        APPLICATION NUMBER: PP1546
        FILING DATE: 30-JAN-1998
      PRIOR APPLICATION DATA:
        APPLICATION NUMBER: PP2911
        FILING DATE: 09-APR-1998
      PRIOR APPLICATION DATA:
        APPLICATION NUMBER: PCT/AU98/01023
        FILING DATE: 10-DEC-1998
      ATTORNEY/AGENT INFORMATION:
        NAME: Monroy, Gladys H
        REGISTRATION NUMBER: 32,430
        REFERENCE/DOCKET NUMBER: 27340-20021.00
        TELECOMMUNICATION INFORMATION:
          TELEPHONE: 650-813-5600
          TELEFAX: 650-494-0792
          TELEX: 706141
      INFORMATION FOR SEQ ID NO: 895:
        SEQUENCE CHARACTERISTICS:
          LENGTH: 2416 base pairs
          TYPE: nucleic acid
          STRANDEDNESS: double
          TOPOLOGY: circular
        MOLECULE TYPE: DNA (genomic)
        RECOMBINANT: NO
        ANTI-SENSE: UNKNOWN
        ORIGINAL SOURCE:
          ORGANISM: PORPHYROMONAS GINGIVALIS
          ORGANISM: PORPHYROMONAS GINGIVALIS
          FEATURE:
            NAME/KEY: misc_feature
            LOCATION: 1...2416
            US-09-221-017B-895

Query Match      32.8%; Score 544.4; DB 4; Length 2416;
Best Local Similarity 59.5%; Pred. No. 1,2e-150;
Matches 961; Conservative 0; Mismatches 646; Indels 9; Gaps

0Y      14 TTATGCAAAAGAAATCAATTTTACGACATCGCGTGGCTGCATGAGCGCCGATTTA 73
          |||||
Db      1929 TTATGCAAAAGAAATCAATTCGATATGGAATCTCGGACCTTCTGTAAGAGGCGTAA 1870
          |||||
          74 TTATGTCAGCAATACCGCAACGATCAAGTCTGCTTAAGGCGCCATCTTGTCTTAA 13
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Db      1949  GACCTGGCCGAAAAACGATCGACTGACTGATGAGCGCGTGGTGGCGGATATGCG 1997

RESULT 5
US-09-221-017B-895/C
: Sequence 895, Application US/09221017B
: Patent No 6444799
GENERAL INFORMATION:
APPLICANT: ROSS, Bruce C.
TITLE OF INVENTION: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF
NUMBER OF SEQUENCES: 1120
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 755 PAGE MILL ROAD
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304-1018
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows
SOFTWARE: FASTSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/221,017B
FILING DATE: 23-DEC-1998
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP1182
FILING DATE: 31-DEC-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP1546
FILING DATE: 30-JAN-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP2911
FILING DATE: 09-APR-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/AU98/01023
FILING DATE: 10-DEC-1998
ATTORNEY/AGENT INFORMATION:
NAME: Monroy, Gladys H
REGISTRATION NUMBER: 32,430
REFERENCE/DOCKET NUMBER: 27340-20021.00
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-813-5600
TELEFAX: 650-494-0792
TELEX: 706141
INFORMATION FOR SEQ ID NO.: 895:
SEQUENCE CHARACTERISTICS:
LENGTH: 2416 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: DNA (genomic)
RHOTHECTICAL: NO
ANTI-SENSE: UNKNOWN
ORIGINAL SOURCE:
ORGANISM: PORPHYROMONAS GINGIVALIS
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1...2416
US-09-221-017B-895

Query Match      32.8%; Score 544.4; DB 4; Length 2416;
Best Local Similarity 59.5%; Pred. No. 1,2e-150;
Matches 961; Conservative 0; Mismatches 646; Indels 9; Gaps

0Y      14  TATGGCAAAAGAAATCAATTTTACGACATCGCGTGGCTGCATGAGCGCCGATTTA 73
          |||||
Db      1929  TATGGCAAAAGAAATCAATTCATATGGAATCTCGGACCTTCTGTAAGAGGCGCTA 1870
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0Y      74  TATGTGACGATACCGCGCAACGATGCTGTGCTTAAGGCGCCATGTGTCTTAA 13
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Db 1869 TGCACCTGCAAAATCCGTTAAAGTTACCTCGGGCCGAAGGTCGTATGTTATCTTAA 1810
 Oy 134 AAAAGCTTTGTTCTCCCTTAATTAATGACGGGTAACATTTGTAAGAGATCGA 193
 Db 1809 CAAGAGCTACGACCTCCGACATTAACCAAGAGGCTGAGCGTGAAGAGATAGA 1750
 Oy 194 ATTAGAAGATCATTTTAAATGAGGCAAAATTTGGTGTCTGAAGAGGCTGTAA 253
 Db 1749 ATTGAGGTGCCGTTGAGACATGGTGGCCGTTGGTGAAGAGTACGCTCAAGAC 1690
 Oy 254 CATGATATGCTGTGATGGAGCACTACTGACATTTTGACAAAGCATTTGTC 313
 Db 1689 CATGACATGCTCCGTGACGCTACGATAGGCTGACATCTCCGCCAAGCATTTACG 1630
 Oy 314 TGAAGCATTAATAAATGTACAGCAGCTGTAATCCATTTGGTATCCGTCAGCATTC 373
 Db 1629 CGTGGCTGTGAAGAGCTTACGGCAGAGCAATCGATGGATTTAAACCGGTATCGA 1570
 Oy 374 AACAGCAACCAACAGCTGTTGAAGCCTTGAAGCCATTTCTCAACCTGATCTGGCA 433
 Db 1569 CAAGGCTTAAAGGCTGTGTAACTACATTTGAGTATGGCTAAGAAAGTGGCGACA 1510
 Oy 434 GGAAGCTATTGCTAGTGTGCTGACATATCAGCTC-----TGAAGAAAGTTGGAGA 487
 Db 1509 CTTCAGAAAGTTCAGCAGCTGAGCCAGATCTCTCCAAAGGAGAGCAATCGGTAG 1450
 Oy 488 GTATATCTCAGAACCTATGAGCCGTGAGCAACAGATGGTGTATTTACCATGGAATC 547
 Db 1449 CCTCATTTGCCAAGCCATCGCAAGGTGAAGAAAGAGCGTTATCACGCTGAGAAAG 1390
 Oy 548 TCGAGTATGAAAGAACTGAAGTGTGAAGGCAATTTGACCTGACCTGTTACCP 607
 Db 1389 CAAGGAAACGACACTACGCTGAGAGTGTGAAGATTTGATGAGTGGACCGGCTCAT 1330
 Oy 608 GTTCATATCATGTGTACAGACATGAAAAATGTTGTCAGACCTTGAAGAACCTATTAT 667
 Db 1329 CTCTCCCTACTGTGATACGACAGAGATGAGAGGCTGCAATGAAATCTTTCAAT 1270
 Oy 668 CTTATACAGGATTAATAAGTGTCAACATCAACATTTTSCCACTACTTGAAGAGT 727
 Db 1269 CCGTACTAGCAGCAAGAAATATCCGCTCGAAGAGATGCTCCCATCTCGAAGAAC 1210
 Oy 728 TCTTAAACCAACGCTCATTTACTATTATTCAGATGATGGATGTGAAGCACTTCC 787
 Db 1209 GATTGAGAGGGGCAAGCCCTCTCATCATTCATGACAGACATGAGAGCAAGCACTCG 1150
 Oy 788 AACCTTGTCTTGAACAGATTCGTGACTTCAATGTTGTTGCTGTAAGAGCCGACG 847
 Db 1149 CACCTTGTGTGAACCGTCTCGCGGACCTCAAGATTCGTGAGTGAAGGCTCCCG 1090
 Oy 848 ATTGCTGATGCTGTAAGCAATGCTTGAAGCAATTTGCTATCTGACAGGTGATACG 907
 Db 1089 ATTGCGCATGTGTCAGAGGCTATGCTCGAAGCAATTTCTATCTGAGGCGGCAAGCT 1030
 Oy 908 GATTACAGAGATCTGACCTTGAATTAAGATCTCAATGACAGCCCTTGCACAGCG 967
 Db 1029 TATCAGCCAAAGACCGGTGAGAGCTGAAATGCTACAGATGATGCTGCTACACG 970
 Oy 968 TGTAAAGTATCAAGTTGAATAGACAGATTTGTAAGTTGAGAGTTCAAGAGTTCAG 1027
 Db 969 TGAAGAAATTAACGTTGATAGAGCAATTAATCTCTTAAAGGAGCGGCAAGAAAG 910
 Oy 1028 AGCTATGCTAACGATTTGACATGATTAATCGAATTTGAAGAAACAACTGCTGACT 1087
 Db 909 AGGATTCCTTCAAGCTATCAGCAGATCAAGAGTCAAGATTAAGCAACAGCAGCTA 850
 Oy 1088 TGACCGTAAATAAAGCTGAAGAGCTTTGGGAAATTTACTGGTGGTGTAGCTTATCAA 1147
 Db 849 CGACGGCAAAAGCTGCAAGAACTTTGGCAAGCTCCCGCGGCTGATGCTTTA 790
 Oy 1148 AGTAGGAGCTGCAAGAGACAGCTTTAAAGAAATGAATTCGATTTGAGAGTCTCT 1207
 Db 789 CGTGGTCTCTCCAGCAGAGTGAATGAAGAAAGAGATCGGTGAGAGTGTCTT 730

Oy 1208 AATGCTACAGCTGACCGCTTGAGAAAGTATGCTGTGCTGTGAGAACAC 1327
 Db 729 GATGCAAGCGCTGCTCATGAGAGGCTGACGATACCGGCGGTAGCGCATTA 1127
 Oy 1268 TAGGCTATTGAAAAATGATACAGCTTACGATGAGGCGGATGATGCTACGAGC 1127
 Db 669 TCGTGCATAGCTGTTTGAAGGCTCAAGGCTGAGAACGAAAGCAACAGATAT 610
 Oy 1328 C---ATTGCTGTGCTGCTGATAGAAAGCTGTACATTTGCTTTAAATGCTGG 1384
 Db 609 CGAGATGCGAAACCGCATGAGAGCGCTTCTGATGATGAGAGGCTGACGAAAGCT 550
 Oy 1385 CGAAGCTCGTGTATTGACAGTGAAGAAACGCTTGCAGAAACAGATTTAATGC 1444
 Db 549 AGAGGCTCGCTGTGTGATGACAGAGTGAAGAAAGGAGAGGAGCTTGCATACAT 490
 Oy 1445 TGCAGAGGTGAGTGGGTGATATGATTAAGAAAGCAATTTGACCTGTCAAGTAC 1504
 Db 489 CCGTACGAGATGTTTTCGAAACCTCTACACGCTGATGATGACCGGCAAGATAC 430
 Oy 1505 ACGATGAGCGCTTCAAAATGCAAGCTTGTAGTACTTATTTGACAGAGAGTATG 1564
 Db 429 ACGTGTAGCATTTGAAGAAATCAGCGCTATCGAGATGTTCTGACTACGAGTGC 370
 Oy 1565 TGTGCTATTAACCTGACACAGTACGCGCAGCGCAGCAATGCGCAGAGTATG 1620
 Db 369 TATGCTGACAAAGAAAGATATATCTGCGGACCGGCTATCGCGAGTATG 314

RESULT 6
 US-08-470-260-7
 Sequence 7, Application US/08470260
 Patent No. 6077706
 GENERAL INFORMATION:
 APPLICANT: Covacci, Antonello
 APPLICANT: Bugnoli, Massimo
 APPLICANT: Telford, John
 APPLICANT: Macchia, Giovanni
 APPLICANT: Rappuoli, Rino
 TITLE OF INVENTION: Helicobacter Pylori Proteins Useful
 NUMBER OF SEQUENCES: 7
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Chilton Corporation
 STREET: 4560 Horton Street
 CITY: Emeryville
 STATE: California
 COUNTRY: USA
 ZIP: 94608-2916
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/470,260
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/256,848
 FILING DATE: 21-OCT-1994
 ATTORNEY/AGENT INFORMATION:
 NAME: McClung, Barbara G.
 REGISTRATION NUMBER: 33,113
 REFERENCE/DOCKET NUMBER: 0316,001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (510) 601-2708
 TELEFAX: (510) 655-3542
 INFORMATION FOR SEQ ID NO: 7:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1838 base pairs
 TYPE: nucleic acid


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Best Local Similarity 58.9%; Pred. No. 4,7e-146;
Matches 966; Conservative 0; Mismatches 664; Indels 9; Gaps 3;

OY 13 ATATGCAAAAGCAATCAATTTTCAGCAGATGCGGCTGCTCCATCGTCCGAGATG 72
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Db 56 AAATGCAAAAGCAATCAATTTTCAGTACTGCGAAGAACCTTTATTTGAAGCGTGA 115
OY 73 ATATGTACACATACCGTCAAGTACGCTGCTGCTTAAAGGGGCGCATGTTGCTTG 132
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 116 GCAACTCCATACGCTGTCTAAATACATGCGGCGCAAGGACGAGATGATTC 175
OY 133 AAAAGCTTTCCTTCCTTCAATTAATACAGGGGTACCATGCTCAAGAGATG 192
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 176 AAAAGCTATGCGCTCCAGATCCACCAAGCGCTGAGCGTGGCTGATG 235
OY 193 AATTAGAAATATTTTGAAGATGCGCAAAATGCTGCTGAAGGCTTCTAAG 252
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 236 AATTAGATGCGCTGATGATGATGATGATGATGATGATGATGATGATGATG 295
OY 253 CCAATATATGCTGATGATGATGATGATGATGATGATGATGATGATGATG 312
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 296 CCGCTATGCTGCGGATGATGATGATGATGATGATGATGATGATGATGATG 355
OY 313 ATGAGAGCTTAAATATGATGATGATGATGATGATGATGATGATGATGATG 372
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 356 AAGAGGTTTGAGATATACAGGCTGAGGCTAACCTTATGAGTGAAGAGGAGCATG 415
OY 373 AAACAGCAACAGCAACAGCTGATGAGGCTTGAAGCCATGCTACACCTGATCTGCA 432
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Db 416 AATAAGCTGCTGAGAGCATATATGAGCTTAAAGGACGAGCAAAAGTGGCGTGA 475
OY 433 AGGAGCTTTCCTGATGCTGATGATGATGATGATGATGATGATGATGATGATG 489
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 476 AAGAGAAATCAACCAAGTGGGACCATTTCTGCAAACTGCAATCAATTCGGAAGC 535
OY 490 ATATCTCAGAGCTATGAGAGCTGCGGCAAGCATGATGATGATGATGATGATG 549
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 536 TCATCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 595
OY 550 GAGGTATGCAAAAGCAACTGAGTGGTGAAGCATGCAATTTGACCGTGTACTGT 609
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 596 AGGCAATTTGAGATGATGATGATGATGATGATGATGATGATGATGATGATG 655
OY 610 CTCATATCATGCTCAGACATGCAAAATGCTTGCAGACCTGTAAGAACCCATTTAT 669
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 656 CCGCTATTTTGTAAACAGCGCTGAGAAATGACCGCTCAATTTGATGATGATGAT 715
OY 670 TAAATCAGGATTAAGATGATGATGATGATGATGATGATGATGATGATGATG 729
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 716 TTTTACGATTAAGAAATCTCTACATGAAGACATCTCCGCTACTAGAAAAACA 775
OY 730 TTAAGCAACAGCTGCTACATCTATTAAGAGATGATGATGATGATGATGATG 789
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Db 776 TGAAGAGGCAACCGCTTTTATCATCGCTGATGATGATGATGATGATGATG 835
OY 790 CCGTGTCTGAGAGATTTCTGCTACTTTCATGATGATGATGATGATGATGATG 849
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Db 836 CTCTAGTGTGATTAATTAAGAGCGGTGATGATGATGATGATGATGATGATG 895
OY 850 TTGGTATGCTGTAAGCTATGCTTGAAGCATTTGCTGATGATGATGATGATG 909
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Db 896 TTGGGAGCAAGAAAGAAATGCTCAAGACATCTCTATTTTAAACGGCGCTCAAGTCA 955
OY 910 TTACAGAGATCTAGACTGATTAAGATGCTCAATGATGATGATGATGATGATG 969
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Db 956 TTAGCAAGAAATGCGCTGATGATGATGATGATGATGATGATGATGATGATG 1015
OY 970 CTAGATTAAGCTGATTAAGATGATGATGATGATGATGATGATGATGATGATG 1029
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Db 1016 GAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1075
OY 1030 CTATGCTAAGCGTATGATGATGATGATGATGATGATGATGATGATGATG 1089
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 1076 ATGTTAAAGACAGATGCGGAGATCAAAACCAATTTGCAAGTACGACAGGATATG 1135
OY 1090 ACCGTAAGAAATACAGAAAGCTTTGGCAAAATAGCTGGTGTGATCTTTATAAG 1149
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1136 ACAGAAAGAAATTTGCAAGAAAGTGTGCTAAATCTCTGCGGCTGTGCTATTAAG 1195
OY 1150 TGAAGAGCAACAGAGACAGCTTTAAAGAAATGAATCTGATGATGATGATG 1209
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1196 TGAGGCTGCGGATGATGATGATGATGATGATGATGATGATGATGATGATG 1255
OY 1210 ATGCTACAGCTGACCGCTTGAAGAGATGATGATGATGATGATGATGATGAT 1269
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1256 GCGGAGCTAAAGCGCGGCTTGAAGAGCATTTGATGATGATGATGATGATG 1315
OY 1270 CCGTATTTGAAGAAATGACAGCTTTGACCTTGAGGGCGATGATGATGATGAT 1329
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1316 GCGGCGCTCAAAAGT---GCATTTGAATTTGACAGATGATGATGATGATGATG 1372
OY 1330 TTGTGCTTCGCTGCTAGAGAGCGTGTACGTAATGCTTTAATGCTGGTACGAG 1389
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1373 TCATCATGCGCGCATTAAGCCCATTAAGCCCATTAAGCCCATTAAGCCCATTA 1432
OY 1390 GCTCCGATGATTTGACAGTGAAGTGAAGAACGCGCTGAGAGAGAGATTTAATGCTGCA 1449
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Db 1433 GCGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1492
OY 1450 CAGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1509
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Db 1493 ATGCAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1552
OY 1510 CAGGCTTCAAAATGCAAGCTTCTGATGATGATGATGATGATGATGATGATG 1569
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1553 TCGCTCTCAAAATCGGCTTCTGATGATGATGATGATGATGATGATGATGATG 1610
OY 1570 CTAATTAACCTGCAAGCTTACGCGACCGGCAAGATGATGATGATGATGATG 1629
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1611 GCATGAATCAAAAGAAAGAAAGCAATCGCGCAATGCTGATGATGATGATG 1669
OY 1630 TGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1648
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1670 GTATGAGAGGATGATGATGATGATGATGATGATGATGATGATGATGATG 1688

RESULT 8
US-08-466-662-7
: Sequence 7, Application US/0846662B
: Patent No. 6130059
: GENERAL INFORMATION:
: APPLICANT: Covance, Antonello
: APPLICANT: Bugnoli, Massimo
: APPLICANT: Relford, John
: APPLICANT: Macchia, Giovanni
: TITLE OF INVENTION: Helicobacter Pylori Proteins Useful For Vaccines And
: FILE REFERENCE: CHIR0057
: CURRENT APPLICATION NUMBER: US/08/466,662B
: CURRENT FILING DATE: 1995-06-06
: NUMBER OF SEQ ID NOS: 8
: SOFTWARE: Patent Ver. 2.1
: SEQ ID NO 7
: LENGTH: 1838
: TYPE: DNA
: ORGANISM: Helicobacter pylori
US-08-466-662-7

Query Match
Best Local Similarity 58.9%; Score 528.6; DB 3; Length 1838;
Matches 966; Conservative 0; Mismatches 664; Indels 9; Gaps 3;

OY 13 ATATGCAAAAGCAATCAATTTTCAGCAGATGCGGCTGCTCCATCGTCCGAGATG 72
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 56 AAATGCAAAAGCAATCAATTTTCAGTACTGCGAAGAACCTTTATTTGAAGCGTGA 115

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OY 73 ATATGATGAGATACCGTCAAGTAAAGCTGTGCTTAAAGGGCCATATGTTCTTG 132
 Db 116 GGCACATCTCATGACGCTGTCAAAAGTAAACATGGGCGCAAGAGGAGATATATATCC 175
 OY 133 AAAAGCTTTGCTTCCCTTAATTAATGACGGGGTAAACATATGCTAAAGATCG 192
 Db 176 AAAAGCTTTGCTTCCCTTAATTAATGACGGGGTAAACATATGCTAAAGATCG 235
 OY 193 AATTAGAAGTATTTGAAAGCTGGGAGCAAAATGCTGCTGAAGTGGCTTAA 252
 Db 236 AATTAGATTTGCTTCCCTTAATTAATGACGGGGTAAACATATGCTAAAGATCG 295
 OY 253 CCAATGATTTGCTTCCCTTAATTAATGACGGGGTAAACATATGCTAAAGATCG 312
 Db 296 CCGCTGATGCTGCGCGCATGGCGACGACGAGCGTGTACTTAATGATTTT 355
 OY 313 ATGAAGACTTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG 372
 Db 356 AAGAGGTTTGAAGAAATACAGGCTGGGCTTAACCTTATTAAGTAAAGAGGATGG 415
 OY 373 AAACAGCAACAGCAACAGCTTGAAGGCTTGAAGGCAATGCTCAACCTGTATCGCA 432
 Db 416 ATAAAGCTGTGAAGCAATCAATTAATGAGCTTAAAGGCAAAAGTATGCGGTA 475
 OY 433 AGAAGCTATGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT 489
 Db 476 AAGAGAAATACAGGCTGGGCTTAACCTTATTAAGTAAAGAGGATGG 535
 OY 490 ATATCTGAGAGCTATGAGAGCTGTGGGCAAGTGTGATGATACATGAGAAATCTC 549
 Db 536 TCACTGCTGAGCTATGAGAGCTGTGGGCAAGTGTGATGATACATGAGAAATCTC 595
 OY 550 GAGGATGAGAAACAGACTTGAAGTGTGAGAGCAATGATGAGAGCAATGATGAG 609
 Db 596 AGGCAATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 655
 OY 610 CTCATATCATGCTGAGCAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG 669
 Db 656 CCGCTTATTTTGAAGAAATACAGGCTGGGCTTAACCTTATTAAGTAAAGAGGATGG 715
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 Db 716 TTTTAAAGGATTAAGAAATGCTCAAGATCAAGCTTTGCACTACTGAGAGATTC 775
 OY 730 TTAAGCAACCGTTCATGCTATTAATGAGATGATGATGATGATGATGATGATGAT 789
 Db 776 TGAAGAGGCAACCGCTTTTAAATCATGCTGAGAGCAATGATGAGAGCAATGATGAT 835
 OY 790 CCGTGTCTTGAACAGATTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 849
 Db 836 CTTAGTGTGATTAATTAAGAGCGTGTGAATTCACAGCGTAAAGCTCCAGCTC 895
 OY 850 TTGGTATGCTGTAAGAGCTTGAAGCAATGCTTCTTGAAGAGGATGAGAGAG 909
 Db 896 TTGGGAG 955
 OY 910 TTACAGAGATCTAGGACTGAAATTAAGATGCTGATGAGAGAGAGAGAGAGAGAG 969
 Db 956 TTAGCAAGAAATGAGGCTTGAAGTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1015
 OY 970 CTAAAGTATGAGTAAAGAGATGAGAGAGATGATGATGATGATGATGATGATGAT 1029
 Db 1016 GAAGATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1075
 OY 1030 CTATGCTACCGATGCTGATTAATGAGATTAAGCAACAACTTGTGACTTG 1089
 Db 1076 ATGTTAAAG 1135
 OY 1090 ACCGTAAAGCTACAG 1149
 Db 1136 ACAAG 1195

OY 1150 TAGAGCTTCAACAG 1209
 Db 1196 TGCGCCTGAG 1255
 OY 1210 ATGCTACAGCTGAG 1269
 Db 1256 GCGGAGTAAAG 1315
 OY 1270 CCGTATGAG 1329
 Db 1316 GCGGAGTAAAG 1372
 OY 1330 TTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1389
 Db 1373 TCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1432
 OY 1390 GCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1449
 Db 1433 GCGGAGTAAAG 1492
 OY 1450 CAGGAGTAAAG 1509
 Db 1493 ATGCGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1552
 OY 1510 CAGGCTTCAAAATGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1569
 Db 1553 TCGCTCTCAAAATGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1610
 OY 1570 CTATTAAGCTGAG 1629
 Db 1611 -CGATGAATCAAAAG 1689
 OY 1630 TGAATGAG 1648
 Db 1670 GTATGAG 1688

RESULT 9
 US-08-256-847C-6
 : Sequence 6, Application US/08256847C
 : Patent No. 6403099
 : GENERAL INFORMATION:
 : APPLICANT: Rappuoli, Rino
 : APPLICANT: Costantino, Paolo
 : TITLE OF INVENTION: Conjugates formed from Heat Shock Proteins and Oligo or Poly
 : FILE REFERENCE: CHIR-0042
 : CURRENT FILING DATE: 1994-11-01
 : PRIOR APPLICATION NUMBER: US/08/256,847C
 : PRIOR FILING DATE: 1993-03-08
 : PRIOR APPLICATION NUMBER: PCT/EP93/00516
 : NUMBER OF SEQ ID NOS: 7
 : SOFTWARE: Patent version 3.1
 : SEQ ID NO 6
 : LENGTH: 1838
 : TYPE: DNA
 : ORGANISM: H. pylori
 : FEATURE:
 : NAME/KEY: CDS
 : LOCATION: (58)..(1695)
 : OTHER INFORMATION:
 : US-08-256-847C-6

Query Match: 31.8%; Score 528.6; DB 4; Length 1838;
 Best Local Similarity 58.9%; Pred. No. 4,7e-146;
 Matches 966; Conservative 0; Mismatches 664; Indels 9; Gaps 3;
 OY 13 ATATGAG 72
 Db 56 AATAGCAAG 115

QY 73 ATATGTAGAGATACGCTCAAGTACGCTTGGTCTCTAAAGGCGCAATGTTCTTC 132
 DB 116 GGCACCTCAGTACGCTCTCAAGTACGCTTGGGCGCAAGAGGAGATGATGATCC 175
 QY 133 AAAAAGCTTTGGTCTCTCTTAATTACTAATGAGGGGTAACCTTGTCTAAAGATCG 192
 DB 176 AAAAAGCTATGGGCTCTCAAGCATCACCAGAGGCGGTGAGCTGTCTAAAGATCG 235
 QY 193 AATTAGAAATCTTTTGAAGAGTGGGAGCAAAATGGTGTCTGAATGGCTTCAAAA 252
 DB 236 AATTAGTGTCCCATGACTAGTACATGGGCTCAACCTTAAAGATGAGCAAAA 295
 QY 253 GCATATGTTGGTGTGATGGAGCACTAGTCAACAGTTTTCACACAGCATTTTC 312
 DB 296 CCGGTATGTCGCGGCGATGAGCAACAGGAGCGGTGAGCTGTCTAAAGATTTTA 355
 QY 313 ATGAGAGCTAAAGAAATGTGACAGAGTCTAATCCAAATGGTATCCGTGAGCATTTG 372
 DB 356 AAGAAAGTTGAGAAATATCAAGGCTGGGGTAAACCTTATGATGAAAGAGCATAGG 415
 QY 373 AAACAGCAACAGCAACAGCTTTGAAGCTTGAAGCCATTGCTCAACCTGTATCTGCA 432
 DB 416 ATAAAGCTCTGAACCCGATTAATGAGCTTAAAGAGAGAGCAAAAAGTGGCGGTA 475
 QY 433 AGAAGCTATTCCTGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATG 489
 DB 476 AAGAAAGTATCAACCCAGTGGGCGACATTTCTGCAAGCTCGATCAATATGCGGAAAC 535
 QY 490 ATATCTAGAGAGCTATGAGAGCTGTGGGCAACGATGTGTGATTAACATGAGAAATCTC 549
 DB 536 TCATCTGCTGAGCTATGAGAAAGTGGGTAAAGAGCGGTATGATGATGATGATGATGATG 595
 QY 550 GAGGTATGAGAAAGCACTGAGAGTGTGAAGGCTGAGATTTGACCGTGTGATGATGATG 609
 DB 596 AAGGCAATTAAGATGAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 655
 QY 610 CTCATATCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 669
 DB 656 CCGCTTATTTTGTATGAGAGAGCTGAGAAAGTACCGCTTAAATGATGATGATGATGATG 715
 QY 670 TAAATCAGGATTAAGAAAGTGTCAAAATCAAGATTTTTCAGTATGAGAGATTC 729
 DB 716 TTTTAAAGGATTAAGAAATCTCTAGCAGAAACATCTCCCGCTACTAGAAAGAAACA 775
 QY 730 TTAAGCAACCGTCTACTATTAATGAGATGATGATGATGATGATGATGATGATGATGATG 789
 DB 776 TGAAGAGGCAACCGCTTTAATCATGCTGAGACATGAGGCGAAAGCTTTAAAGCA 835
 QY 790 CCGTGTCTGAGACAGATTCGCTACTTTCATGATGATGATGATGATGATGATGATGATGATG 849
 DB 836 CTCTAGTGTGAATTAATTAAGAGCGGTGAATGTCAGCGGTAAAGCTCCAGGCT 895
 QY 850 TTGATGATGCTGTAAGAGTATGATGATGATGATGATGATGATGATGATGATGATGATG 909
 DB 896 TTGGGAG 955
 QY 910 TTACAGAGATCTAGACATTTAAAGATGCTAATGAGATGAGAGAGAGAGAGAGAGAGAG 969
 DB 956 TTAGGAG 1015
 QY 970 CTAAAGTATGAGTGAATGAAGTACAGCAATATTGTTGAAGGTTCCAGAGATTCAGAG 1029
 DB 1016 GAGGAGTGTGATGAG 1075
 QY 1030 CTATGCTAAGCGTATGAGTGAATTAATGAGCAATTTGAAGAGAGAGAGAGAGAGAGAG 1089
 DB 1076 ATGTTAAAG 1135
 QY 1090 ACCGTGAAGAAAGTACAG 1149
 DB 1136 ACAAG 1195
 QY 1150 TAGGAGCTCCAG 1209

DB 1196 TGGGCGCTGCGAGTGAAGTGAATGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1255
 QY 1210 ATGCTACAGCTGCAAGCCGTTGAGAGAGATGCTGCTGAGTGGAGACAGCACTATTA 1269
 DB 1256 GCGGAGTGAAG 1315
 QY 1270 CCGTATTGAAG 1329
 DB 1316 GCGGCGCTCAAGAGT---GCATTTGAATTTGACAGATGAGAGAGAGAGAGAGAGAGAG 1372
 QY 1330 TTGTCCTGCTGCTAG 1389
 DB 1373 TCATCATGCTCCGCTATTAAG 1432
 QY 1390 GCTCCGATGATTGAG 1449
 DB 1433 GCGGAGTGTGATGAG 1492
 QY 1450 CAGGTGATGAGTGTGATGAG 1509
 DB 1493 ATGCGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1552
 QY 1510 CAGGCTTCAAGTGAAGCTTCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1569
 DB 1553 TCGCTTCAAG 1610
 QY 1570 CTAAATAGCTGAACAGCTGAG 1629
 DB 1611 -GCATGAATTAAG 1669
 QY 1630 TGATGGTGGAGTGGGCGG 1648
 DB 1670 GTATGGAGGAGATGGGCGG 1688

RESULT 10
 US-08-467-822-28
 ; Sequence 28, Application US/08467822
 ; Patent No. 5843460
 ; GENERAL INFORMATION:
 ; APPLICANT: Labigne, Agnes
 ; APPLICANT: Sauerbaum, Sebastien
 ; APPLICANT: Ferrero, Richard L.
 ; APPLICANT: Thibierge, Jean-Michel
 ; TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
 ; TITLE OF INVENTION: HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THE
 ; TITLE OF INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING SAID
 ; TITLE OF INVENTION: POLYPEPTIDES
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
 ; ADDRESS: Dunnet
 ; STREET: 1300 I Street, N.W.
 ; CITY: Washington
 ; STATE: D.C.
 ; COUNTRY: USA
 ; ZIP: 20005-3315
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patenlin Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/467,822
 ; FILING DATE: 06-JUN-1995
 ; CLASSIFICATION: 435
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/447,177
 ; FILING DATE: 19-MAY-1995
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/432,697

Wed Apr 16 08:05:36 2003

us-09-001-737-7.rn1

Page 11

FILED DATE: 02-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495, 0137-02000
TELEPHONE: (202) 408-4400
TELEFAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 28:
SEQUENCE CHARACTERISTICS:
LENGTH: 2284 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-457-822-28

Query Match 29.9% Score 496.6; DB 2; Length 2284;
Best Local Similarity 58.1%; Pred. No. 1,5e-136;
Matches 953; Conservative 0; Mismatches 674; Indels 12; Gaps 4;

13 ATATGCAAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 72
13 ATATGCAAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 72
504 AAATGGCAAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 563
73 ATATGCAAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 132
564 GACAATCCATGACGCTGCTGAAAGTACATGCGGCAAGAGGAGGAGGAGGAGGAGGAGG 623
133 AAAAAGCTTTGGTCTCCCTTAATTAATGACGCGGTAACCATTTGCTAAAGAGATCG 192
624 AAAAAGCTTTGGTCTCCCTTAATTAATGACGCGGTAACCATTTGCTAAAGAGATCG 623
193 AATTAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 252
684 AATTAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 743
253 CCAATGATATGCTGCTGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 312
744 CCGCTGATGCGCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 803
313 ATGAAGAGCTAAATATGACAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 372
804 AAGAGGCTGAGGAGATATGACAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 863
373 AAACAGCAACAGCAACAGCTGTTGAAGCTTTGAAGCCATTTGCTCAACTGTATCTGCA 432
864 ATAAAGCGCTGAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 923
433 AGGAGCTATGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 489
924 AAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 983
490 ATATGCAAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 549
984 ATATGCAAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 1043
550 GAGGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 609
1044 AGGAGCTATGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1103
610 CTCATATGATGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 669
1104 CCGCTTACTTTGTAACCAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1163
670 TAATCAGGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 729
1164 TTTTACGAGGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1223
730 TTTTACGAGGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 789
1224 TGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1283

790 CCGTGTCTGAAACAAAGATGCTGATCTTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTG 849
1284 CCGTGTCTGAAACAAAGATGCTGATCTTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1343
850 TTGGTGAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 909
1344 TTGGTGAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1403
910 TTACAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 969
1404 TTACAGAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1460
970 CTAAATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1029
1461 CCAATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1520
1030 CTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1089
1521 AGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1580
1090 ACCGTAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 1149
1581 ACAAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 1640
1150 TAGAGCTCCAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1209
1641 TGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1700
1210 ATGCTACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1269
1701 GCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1760
1270 CCGTATGTAAGAAATCAATTTTCAGCAGATGCGGGCTGCTGCCATGTCGCCGAGTTG 1329
1761 GCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1817
1330 TTGGTGAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1389
1818 TCGCTTACAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1877
1390 GCTG 1449
1878 GCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1937
1450 CAGGCTG 1509
1938 ATGCTACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1997
1510 CAGGCTG 1569
1998 TCGCTTACAAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2055
1570 CTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1629
2056 -GCTG 2114
1630 TGAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1648
2115 GATGCTG 2133

RESULT 11
US-08-432-697-28
Sequence 28, Application US/08432697
Patent No. 6248330
GENERAL INFORMATION:
APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Thibierge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THE

D	492	GATGACGCGCGCGGTGAGGGGACACGACGGGCAACCGCTGTGGCCAGGCTTGTGTTCCG	551
O	315	GAGAGACTAAAAATGTGACGACGAGTGTCTAATCCATTTGTTATTCGTCGAGGATTGAA	374
D	552	GAGGGCTTCGCCAACGTCGCGCGGGGGGCAACCGCGCTCGTCTCAACCGGGGATCGAA	611
O	375	ACAGCAACAGCAACGACTGTTGAAGCCCTTGAAGGCCATTGCTCAACCTGTATCTGCAG	434
D	612	AAGGCGCGTGAGAAAGGTGACCGAACCCCTGCTCAAGGGGCGCCAAAGAGGTGAGACCAAG	671
O	435	GAACTATTGCTCAGGTGCGTGCAGTATATCATCCCTCTGTAAAAATTGSGAGATATATC	494
D	672	GAGCAGATTTGCGGGCGACCGCGACGCTATTGTGGGGGGGTGACCAATCATCGGTGACTGATC	731
O	495	TCGAGACCTATGAGAGGTGTGGGCAACGATGTGTGATTCATCTCAAGAAATCTCGAGGT	554
D	732	GCCGAGCGATGAGCAAGAGTGGCAACGAGGGCGTATCATCGCTGAGAGATCCAAACAC	791
O	555	ATGGAACACAGACTTGAAGTGGTTGAAGGCAATGCAATTATACCGTGTACTCTTCACA	614
D	792	TTTGGCGCTGCAGCTGACACTACCGAGGATATGCGTTTCCAAAGGGCTACATATCGGG	851
O	615	TACATGCTCACAGACATGAAAAATGTTTGCAGACCTTGAAAAACCATTTATCTTAATC	674
D	852	TACCTTCGACGACGACCGGAGCGTCAGAGGGGGCTGTGGAGAGACCCCTACATCTGCTG	911
O	675	ACGGTAAAAAAGTGTCAAAATCATCAAGACATTTTGGCACTACTTGAGSAGTCTTAAA	734
D	912	GTCAGCTCAAGGTTGTCACATGTCAGAGATGTCGCGCGCTGCACAAAGATCATCGGA	971
O	735	ACCAACGCTCATTTACTCATTTATGAGATGATGTGATGGTGTAAAGCACTTCACACCTT	794
D	972	GCGGGTAAACCGCTGCTATCATGGCGAGGACGTCGAGGGGAGGAGCGCTGTCCACCGTG	1033
O	795	GCTTTGAAACAAGATTCGTGTGACTTTTCATGTGGTGTCTGTCAAGGGCGACAGATTGGT	854
D	1032	GTCGTCAACAAGATCGGGGACCTTCATGATGGTGGGTCTAAAGGCTCCGCGTTTCGCG	1091
O	855	GATCGTGTAAAGCTATGCTTGAAGACATTTGCTATCTTGACAGGTGTGACAGTATTACA	914
D	1092	GACGCGCGCAAGCATCTCTGACGATATGGCATTTCTCAACGCGTGTGACAGTATATCAC	1151
O	915	GAGATCTAGACACTTGAATTTAAAGATGCTACATGACACCCCTTGACAGGCTGTGAAG	974
D	1152	GAAAGAGTTCGGCTACACCTGTGAAAGCGCCGACGCTGCTGTAGGCAAGGCCCAAG	1211
O	975	ATTACAGTTATTAAGATAGACAGATTAATGTGTAAAGTTCAAGAAATTCTGAAAGCTAT	1034
D	1212	GTGCGGTGACCAAGGACGAGACACCATTCGTGAGGGGGCGGGTGTGAACAGACCGATC	1271
O	1035	GCTAACCGTATTGCACTGATTAATATGGCAATTATGAACAACAACCTTCGACTTTGACCGT	1094
D	1272	GCGGACGAGTGGCCAGATCCGCAAGGAGATTCAGAAACGCGACTCCGATACGACCGT	1331
O	1095	GAAAACTACAGAACGTTTGGCAAAATTAGCTGTGTGTAGCTGTATTACAAGTAGGA	1154
D	1332	GAGAAAGTGTGAGAGAGCGCTGGCCAAAGCTGCGCGGTGTGTGTCGCTATCAGGCCGT	1391
O	1155	GCTCCACAGAGACGCTTTTAAAGAAATGAACATTGTGCAATTGAGATGCTCTAAATGCT	1214
D	1392	GCGCCACCGAGGTGAGACTCAAGAGGCGCAAGACCGCATGAGAGATGCGGTTCCAT	1451
O	1215	ACAGCTGACAGCGTTGAAGAAAGATCTGTGTGTGTGTGAAACAGCACTTATTAAGGTT	1274
D	1452	GCCAAAGCGCGGTGAGAGAGGACATCGTCCGCGGTGGGGTGTGTACCTGTTCAGACGG	1511
O	1275	ATTGAAAAAGTATAGACGCTTTTGAAGCGTTTGAAGGCGATATATGCTATGACATTAATGG	1334
D	1512	GCCCCACCTGTGACAGACTGATTAAGCTTCGAAAGGCAACGAGCGACCGCGGCAACATCTGTG	1571
O	1335	CTTGCGTCTCTGAAGAGACCTGTAGCTCAAAATGCTTTAAATGCTGGGTAGAGAGGCTTC	1394

Db 1572 AAGTGGGCGTGGAGGCCCGCGTGAACAGATCGCTTCAACTCCGGGCTGAGCCGGC 1631
OY 1395 GTAGTTATGTGACAGTTGAAACAGCCCTGCAGACAGACAGATTTATGCTGCAACAGT 1454
Db 1632 GTGCTGGCCGAGAGAGTGGCGCACTCCGCTTGCCACAGACTGAGCGCTCAGACCGGT 1691
OY 1455 GAGTGGGTGATATGATTAACAGATCAATGACCCCTGTCAAGATCAACAGATGAGCG 1514
Db 1692 GTCTACGAGATCTGCTGCTGCGCGGCTTGCTGCTCAAGGTGACCCCTGCGGCG 1751
OY 1515 GTTCAAAATGACAGCTTGTAGTACTTATTTTGAACAGAGAGAGAGTGTGCTAAT 1574
Db 1752 CTGCGAATGCGCCCTCATCGCGGGCTGTCTGACACCGAGCGGTGCTGCGGAC 1811
OY 1575 AAGCTGAA 1583
Db 1812 AAGCGGAA 1820

RESULT 14

US-09-103-840A-2
: Sequence 2, Application US/09103840A
: Patent No. 6294328
: GENERAL INFORMATION:
: APPLICANT: FLEISCHMAN, Robert D.
: APPLICANT: WHITE, Owen R.
: APPLICANT: FRASER, Claire M.
: APPLICANT: VENTER, John C.
: TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
: FILE REFERENCE: 2436-2007.00
: CURRENT APPLICATION NUMBER: US/09/103,840A
: NUMBER OF SEQ ID NOS: 2
: SOFTWARE: Patentin Ver. 2.1
: SEQ ID NO 2
: LENGTH: 4403765
: TYPE: DNA
: ORGANISM: Mycobacterium tuberculosis
: FEATURE:
: OTHER INFORMATION: CDC 1551
: OTHER INFORMATION: "n" bases at various positions throughout the sequence
: OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match

Best Local Similarity 55.88; Score 458.6; DB 4; Length 4403765;
Matches 875; Conservative 0; Mismatches 694; Indels 0; Gaps 0;

OY 15 ATGGCAAAAGAAATCAATTTTCAGCAAGATGCGGCTGCGCCATGCTGCGCGAGTTGAT 74
Db 530048 ATGGCCAAAGCAATTCGTCAGCAGAGAGGCCCGCTGCGGCTGAGCGGGCTTGAAC 530107
OY 75 ATGTACAGATACCGTCAAGATACGCTGTCTTAAGGGCGCAATGTGTTCTTGA 134
Db 530108 GCCCTGCGCGATGCGTAAAGATGATTTGGGCCCAAGGCCCAACGTCGTCTGGA 530167
OY 135 AAACCTTTGTTCCCTTAATTAATGACGGGGTAACCATGCTTAAGAGATGAA 194
Db 530168 AAGAAATGGGGTGGCCCCACGATCACCAAGATGCTGTCATGSCCAAGAGATCAG 530227
OY 195 TTAGAAGATCATTTGAAGAACATGGAGCAAAATTTGTCTGAAGTGGCTTCAAC 254
Db 530228 CTGAGAGATCGTACGAGAAAGATCGGCCCGACAGTGTCTCAAGAGATGACCAAGAGACC 530287
OY 255 AATGATATGCTGCGATGAGAGAGACTACTCAACAGTTTGTACACAGCATTTGTTAT 314
Db 530288 GATGAGCTGCGGATGAG 530347
OY 315 GAGGACTAAAAATGTGACAGAGAGTCTTATTCATTTGATGCTGAGAGATTGAA 374
Db 530348 GAGGGCTGCGCAAGTCTGCGGCGCGCCCAACCCCTGCTGCTCAACCCGCAATCGAA 530407

OY 375 ACAGCAACAGCAACAGCTGTGTAAGCCTTGAAAGCCATTGCTCAACCTGTATCTGACAG 434
Db 530408 AAGCCCTGTGGAGAGAGTCAACAGACCCCTCTCAAGGGCGCCAAAGAGTCTCAGACCAAG 530467
OY 435 GAAGCTATTTGCTCAGTGTGCTGCTCAGATATCATACGCTGTGAAAAGTGTGAGATATAC 494
Db 530468 GAGCAAGATTTGGCGGACAGCCAGATTTCCGGCGGGTGACAGTCCATCCGTGACTGCTAG 530527
OY 495 TCAAGAGCTATGAGCGGTGGGCAAGATGATGTGATATACATCAAGAAATCTGAGGT 554
Db 530528 GCCGAGCGGATGAGCAAGAGTGGGCAAGAGGGGTGATCACCTGTGAGAGATCCAGAC 530587
OY 555 ATGGAAGCAAGACTGATGATGATGAGGATGATGATGATGATGATGATGATGATGATGAT 614
Db 530588 TTGGGCTGTGAGTCTGAGCTCAGAGCTCAGAGGATGATGATGATGATGATGATGATGAT 530647
OY 615 TACATGCTCAGACAGCAATGAAAAATGTTGACAGCTTGAAGAACCATTTATCTTATAC 674
Db 530648 TACTTGATGACCGAGCCGAGGCTGACAGAGAGGCTGTGAGAGACCCCTACATCTGCTG 530707
OY 675 ACGGATAAAAAGTGTCAAAACATCCAGACATTTTCCACTACTTGTGAGAGAGTTCTTAA 734
Db 530708 GTCAAGTCAAGGTGTCTCACTGTCAAGATCTGCTGCGCTGCTGCAAGAGTCAATGGA 530767
OY 735 ACCAACCCTCCATTAATCTATTTATGAGATGATGATGATGATGATGATGATGATGATGAT 794
Db 530768 GCCGATTAAGCCGCTGCTGATCATGCGGAGAGAGTGAAGGCGAGCGCTGTCCACCTG 530827
OY 795 GTCTTGACAGATGCTGTGATCTTCAATGTGTGCTGTCGCAAGCGCAGATTTGAT 854
Db 530828 GTCTGTCACAGATGCTGTGATCTTCAATGTGTGCTGTCGCAAGCGCAGATTTGAT 530887
OY 855 GATGCTGTAAAGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 914
Db 530888 GACCCGCGCAAGGAGATGCTGAGAGATGATGATGATGATGATGATGATGATGATGAT 530947
OY 915 GAGGATCTAGAGCTTAATTTAAAGATGCTCAATGACAGCCCTTGACAGAGCTGCTAAG 974
Db 530948 GAGAGGTGCTGCTGAGCTGTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 531007
OY 975 ATTAAGTGTGATTAAGATGACAGATATTTGTAAGGCTTCAAGAGTTCAAGACTAAT 1034
Db 531008 GTCTGTGTCACAG 531067
OY 1035 GCTAACCGTATTTGCACTGATTAATTCGAATTGAAACAAACAACTTGTGACTTGACCGT 1094
Db 531068 GCCGAGCAGAGTGGCCGAGATCCGCGAGAGATCGAAGAACAGCAGATCGACTACAGCGT 531127
OY 1095 GAAAGATCAAGAGAGTGTGCGCAAAATAGTGTGTGTATCTGATTAAGATGAGA 1154
Db 531128 GAGAGGTGCGAG 531187
OY 1155 GCTCAACAGAGAGAGCTTTAAAGAAATGAACCTGTGCTGATGAGATGCTCAATGCT 1214
Db 531188 GCGCGACAG 531247
OY 1215 ACAGCTGACAGCGCTGTAAGAGATGCTGTGCTGTGTGTGTAAGAGAGAGAGAGAGAG 1274
Db 531248 GCGAGAGCGCTGCTGTAAG 531307
OY 1275 ATTGAAGAGTACAGAGCTTGTGAGCTTGAAGGGCGATGATCTACTGAGAGATTTGTTG 1334
Db 531308 GCCCGAGAGCTGAG 531367
OY 1335 GTTGTGCTGTAGAGAGAGCTGTACGTAATTTGCTTTAATGCTGTGATGAGAGAGCTCC 1394
Db 531368 AAGGTGGGCTGTGAG 531427
OY 1395 GTAGTTATTTGACAAAGTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1454
Db 531428 GTGTGTGCGAG 531487
OY 1455 GAGTGGTGTGATATGATTAACAGAGATCATGTAGCCCTGTCAAGATTAACAGATGACCG 1514

Db 529086 GCGAGGCCATGGAACAGATGGGCGACAGAGGCCGTCATCACCCTGCAGAGCATCCAAACC 529145
Oy 555 ATGGAACAAACACTTGAAGTGGTTGAGAGCATCAATTTGACCGTGTTCCTCA 614
Db 529146 TTGGGCGTCGACAGTGCAGCTCAGCTACCAGAGGATGATCGGGTTGCGCAAGGGCTACATCTCGGG 529205
Oy 615 TACATGTCACAGACATGAAAAATGGTTGCGAGACTTGGAAAAACCAATTTATCTTATTC 674
Db 529206 TACTCTGTCGACCGACCCGGAGCGCTCAGGAGCGCGTCTCGAGAGACCCCTACATCTGCTGG 529265
Oy 675 ACGATAAAAAAGTGTCAACATCCAGACATTTTGGCCACTGTTAGGAAGTTCTTAA 734
Db 529266 GTACAGCTCCAAAGTGTCTCCACTGTGCAGAGATCTCTGCTCCGCTGTCCAAAGATCATCGGA 529325
Oy 735 ACCAAGCTGCATTACTACTATTATTCAGATGATGATGGATGAGTGTGTAAGCACTTCCACCCCT 794
Db 529326 GCGCGTAAGCGCCCTCTGATATCCCGAGAGAGCTCGAGGCGACGGCCCTGTCCACCCG 529385
Oy 795 GTCTTGAAACAATTCGTGTGTAATTTCAATGGTTGGTGTGCAAGGCCGAGATTTGGT 854
Db 529386 GTGCGCAACAAATCCCGGACCTTCAAGTGTGGTGGGTCAAGGCTCCCGGCTTCGGC 529445
Oy 855 GATCGTGTAAAGCATGTGTGTGAGACATTTGATCTTGCAGAGTGTACAGATTA 914
Db 529446 GACGCGCGCAAGGAGTGTCTGAGGATATGTGGCATCTTCACCGGTGTGTCAAGTATCAGC 529505
Oy 915 GAGATCTGAGACTTGAATTAAGATGTCACATGACACCTTGCAGAGCTGTAA 974
Db 529506 GAAAGGTCGGCTGTACGCTGTGAGAGAGCCGACCTGTCTGCTAGAGAGGCCGACAG 529565
Oy 975 ATTACCTGTAAAGATATGACACAGTAAATTTGTGAAGTTCCAGAAAGTTCCAGAGCTAT 1034
Db 529566 GTCTGTGTACCAAGAGACAGACACCATGTGTGTGGGGCCCGGTGTACACCGACGCGATC 529625
Oy 1035 GCTAACGTTATTCACACTGATTTAAATGCAATTTAGAAACAACAATTCGACTTGAACCGT 1094
Db 529626 GCGCAGAGTGGCCCAAGATCCGCGAGAGATATCGAAGACGAGCTCCGATACACACGT 529685
Oy 1095 GAAAACTCAAGAAAGCTTTGGCGAAATTAAGTGTGTGTGTAGCTGTTATCAAGTAGA 1154
Db 529686 GAGAAAGTGTCAAGAGCGCGGTGGCCAAAGCTGCGGTGTGTGCGTATCAAGCGCGGT 529745
Oy 1155 GCTCAACAGAGACAGCTTTAAAGAAATGAACCTTGCACTGAGAGATGCTCTAAATGCT 1214
Db 529746 GCGCCACACGAGGTCTGAACCTCAAGACCGCAAGCACAGCATGAGAGATGCGTGTGCAT 529805
Oy 1215 ACAGGTGCGACCGCTTGAAGAAAGTATGCTGTGTGTGTGTGAAGACACTATTAAGCTT 1274
Db 529806 GCGCAAGCGCGCGTGTGAGAGAGGAGATGTGCGCGGTGGGGGTGTACGCTGTTCGAAAGC 529865
Oy 1275 ATTAAAAAGTACAGAGCTTTAGCTGTGAGGCGATATGCTATCGAGACTAATGTTG 1334
Db 529866 GCGCCGACCTGTGACGAGTGAAGCTGAAGGCGACGAGCGCGCGCGGCAACATGTGTG 529925
Oy 1335 CTGTGTGCTGTGAAGAGCGCTGTACGTCAAAATGCTTTAAATGTGGGTACGAAGCTCC 1394
Db 529926 AAGGTGGCGTGTGAGAGCGCGCTGACAGCATGCCCTTCACTCCGGGTGTGAAGCGCGGC 529985
Oy 1395 GTACTTAATTTGACAGTTGAAAAACAGCGCTGTGAGAGAAAGAAATTAATGCTGCACAGCT 1454
Db 529986 GTGTGTGGCGAAGAGTGGCGCACCTGCCGTGCCGACGAGCTAACGCTCAGACGGGT 530045
Oy 1455 GAGTGGGTGTATGATTAATAACAGAAATCATGACCTTGTCAAGATTAACAGCATACGACG 1514
Db 530046 GTCTACGAGATATGCTGCTGCTGCTGCGGGTGTGTGACCCGGTAAAGTACACCGTGTGCGG 530105
Oy 1515 CTTCAAATTCAGCTTCTGTAGCTATGCTTAATTTGACACAGAAAGCATGTTGTGCTAAT 1574
Db 530106 CTGGAATATGAGGGGTCTCATGCGGGGCTGTCTCTGACACCGAAGCGCGCTTCCGAC 530165
Oy 1575 AAACTGAA 1583
Db 530166 AAGCGGAA 530174

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